Listing of Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A method of detecting cardiac repolarization abnormality using at least one electrocardiogram signal, the method comprising:

deriving a total quantity of representative beats of the at least one electrocardiogram signal taken from a patient ECG;

using at least one morphology shape descriptor to determine a total quantity of values representing the total quantity of representative beats~~, wherein the morphology shape descriptor utilizes any one of the following morphology features to determine the total quantity~~;

~~a maximum morphology feature;~~

~~a minimum morphology feature;~~

~~an area morphology feature;~~

~~an amplitude morphology feature;~~

~~a slope morphology feature; and~~

~~a time interval morphology feature; and~~

generating a template using at least one value corresponding to at least one of the representative beats;

comparing the template and at least one value corresponding to at least one other of the representative beats for a variation;

comparing the variation to a threshold value, wherein the threshold value is derived from trending, further wherein trending includes a time serial analysis; and

using data corresponding to at least some of the total quantity of values to assess cardiac repolarization abnormality in the patient.

2. (Original) A method as set forth in claim 1 wherein the total quantity of representative beats comprises at least one beat representative of each lead of the at least one electrocardiogram signal.

3. (Cancelled)

4. (Currently Amended) A method as set forth in claim ~~3~~ 1 wherein a cardiac repolarization abnormality exists if a variation between the template and the at least one value corresponding to at least one other of the representative beats is greater than a threshold value.

5. (Original) A method as set forth in claim 4 and further comprising adaptively adjusting the threshold value based at least in part on a level of noise in the at least one electrocardiogram signal.

6. (Currently Amended) A method as set forth in claim ~~3~~ 1 and further comprising altering the template based at least in part on the at least one value corresponding to the at least one other of the representative beats.

7. (Original) A method as set forth in claim 1 and further comprising normalizing at least some of the values of the total quantity of values.

8. (Original) A method as set forth in claim 1 wherein the at least one electrocardiogram signal comprises a first electrocardiogram signal representative of a first duration of time and a second electrocardiogram signal representative of a second duration of time, and wherein the first duration of time and the second duration of time are non-continuous.

9. (Original) A method as set forth in claim 1 and further comprising:

administering a pharmaceutical drug to a patient;

obtaining the at least one electrocardiogram signal from the patient, the at least one electrocardiogram signal comprising a first electrocardiogram signal comprising beats prior to the administration of the pharmaceutical drug and a second electrocardiogram signal comprising beats after the administration of the pharmaceutical drug; and

determining a variation between values of the total quantity of values that correspond to the first electrocardiogram signal and values of the total quantity of values that correspond to the second electrocardiogram signal.

10. (Original) A method as set forth in claim 9 and further comprising statistically analyzing the variation.

11. (Original) A method as set forth in claim 1 and further comprising tagging at least one value of the total quantity of values with a marker.

12. (Original) A method as set forth in claim 11 wherein the marker is a measurement that does not change over time.

13. (Original) A method as set forth in claim 11 wherein the marker is a measurement that changes over time.

14. (Original) A method as set forth in claim 11 and further comprising using the marker as part of a discriminator of cardiac repolarization abnormality.

15. (Original) A method as set forth in claim 1 and further comprising displaying data corresponding to the at least one electrocardiogram signal.

16. (Currently Amended) A method of detecting cardiac repolarization abnormality using at least one electrocardiogram signal, the method comprising:

deriving a total quantity of representative beats of the at least one electrocardiogram signal taken from a patient ECG;

using at least one morphology shape descriptor to determine a total quantity of values representing the total quantity of representative beats~~, wherein the morphology shape descriptor utilizes any one of the following morphology features to determine the total quantity~~;

~~a maximum morphology feature;~~

~~a minimum morphology feature;~~

~~an area morphology feature;~~

~~an amplitude morphology feature~~;

~~a slope morphology feature; and~~

~~a time interval morphology feature; and~~

generating a template using at least one value corresponding to at least one of the representative beats;

comparing the template and at least one value corresponding to at least one other of the representative beats for a variation; and

comparing the variation to a threshold value, wherein the threshold value is derived from trending, further wherein trending includes a time serial analysis.

~~using the comparison to determine whether a cardiac repolarization abnormality exists in the patient.~~

17. (Original) A method as set forth in claim 16 wherein the total quantity of representative beats comprises at least one beat representative of each lead of the at least one electrocardiogram signal.

18. (Original) A method as set forth in claim 16 wherein the at least one electrocardiogram signal comprises a first electrocardiogram signal representative of a first duration of time and a second electrocardiogram signal representative of a second duration of time, and wherein the first duration of time and the second duration of time are non-continuous.

19. (Original) A method as set forth in claim 16 and further comprising:

administering a pharmaceutical drug to a patient;

obtaining the at least one electrocardiogram signal from the patient, the at least one electrocardiogram signal comprising a first electrocardiogram signal comprising beats prior

to the administration of the pharmaceutical drug and a second electrocardiogram signal comprising beats after the administration of the pharmaceutical drug; and

determining a variation between values of the total quantity of values that correspond to the first electrocardiogram signal and values of the total quantity of values that correspond to the second electrocardiogram signal.

20. (Currently Amended) A device for detecting cardiac repolarization abnormality using at least one electrocardiogram signal, the device comprising:

means for generating a total quantity of representative beats of the at least one electrocardiogram signal taken from a patient ECG;

means for using at least one morphology shape descriptor to determine a total quantity of values representing the total quantity of representative beats~~, wherein the morphology shape descriptor utilizes any one of the following morphology features to determine the total quantity~~;

~~a maximum morphology feature;~~

~~a minimum morphology feature;~~

~~an area morphology feature;~~

~~an amplitude morphology feature;~~

~~a slope morphology feature; and~~

~~a time interval morphology feature, and~~

generating a template using at least one value corresponding to at least one of the representative beats;

comparing the template and at least one value corresponding to at least one other of the representative beats for a variation;

comparing the variation to a threshold value, wherein the threshold value is derived from trending, further wherein trending includes a time serial analysis; and

means for using data corresponding to at least some of the total quantity of values to assess cardiac repolarization abnormality in the patient.